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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,460	05/24/2006	Satoshi Fujita	1015282-000070	5517

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EXAMINER	
BOWERS, NATHAN ANDREW	

ART UNIT	PAPER NUMBER
1797	

NOTIFICATION DATE	DELIVERY MODE
06/04/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

Office Action Summary	Application No.	Applicant(s)	
	10/580,460	FUJITA ET AL.	
	Examiner	Art Unit	
	NATHAN A. BOWERS	1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 May 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *24 May 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *031407, 052406*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1) Applicant has invoked 35 U.S.C. 112 sixth paragraph by including claim elements "inspection means for detecting," "control means for operating," "memory means for storing," and "analysis means for making a multifactorial analysis." However, the written description fails to disclose the corresponding structure, material, or acts for each claimed function. The specification does not indicate what structures correspond to the claimed "inspection means for detecting," "control means for operating," "memory means for storing," and "analysis means for making a multifactorial analysis." Accordingly, Applicant is required to:

(a) Amend the claims so that the claim limitations will no longer be means plus function limitations under 35 U.S.C. 112, sixth paragraph; or

(b) Amend the written description of the specification such that it expressly recites what structure, material, or acts perform the claimed function without introducing any new matter (35 U.S.C. 132(a)).

If Applicant is of the opinion that the written description of the specification already implicitly or inherently discloses the corresponding structure, material, or acts so that one of ordinary skill in the art would recognize what structure, material, or acts perform the claimed function, Applicant is required to clarify the record by either:

(a) Amending the written description of the specification such that it expressly recites the corresponding structure, material, or acts for performing the claimed function and clearly links or associates the structure, material, or

acts to the claimed function, without introducing any new matter (35 U.S.C. 132(a)); or

(b) Stating on record what the corresponding structure, material, or acts, which are implicitly or inherently set forth in the written description of the specification, perform the claimed function. For more information, see 37 CFR 1.75(d) and MPEP 608.01(o) and 2181.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2) Claims 4-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "two-dimensional" in claims 4-15 is a relative term which renders the claim indefinite. The term "two-dimensional" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The term “two-dimensional” is typically used to refer to a measure of spatial extent, especially width, height, or length. It is unclear how information can be “two-dimensional.”

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3) Claims 1-5, 8 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Pourahmadi (US 20020055167).

With respect to claim 1, Pourahmadi discloses a biological information inspection system comprising a plurality of light emitting diodes and photodetectors capable of monitoring a chemical reaction. This is disclosed in paragraphs [0117] and [0118]. Each light source and photodetector pair represents an inspection means capable of detecting biological information. Furthermore, a plurality of sensor chips (Figure 3:101) are provided to fit into respective holding portions of a carrier (Figure 3:211) so that each sensor chip corresponds to an optical inspection means. This is disclosed in paragraph [0057]. Pourahmadi teaches in paragraphs [0059]-[0064] that a sensor chip identifying portion is provided for providing information such as the type of chip, program information such as specific protocols for the processing of the chip, tolerances for accept and reject, serial numbers and lot codes for quality tracking, and provision for storing the results of the processing. Additionally, Pourahmadi states that control, memory and analysis means are provided in the form of processing electronics,

microprocessors, multiplexers and sensor circuits for controlling the operation of the chip.

With respect to claims 2-5, Pourahmadi discloses the apparatus in claim 1 wherein each sensor chip comprises a cartridge. Pourahmadi teaches that each sensor chip (Figure 16:177) is housed within a cartridge (Figure 16:161) that corresponds to a sensor chip holding portion (see Figure 3). As noted above, a detection portion comprising optical detection means is used to inspect the sensor chip when the sensor chip is positioned within the holding portion.

Pourahmadi further discloses that each of the sensor chips has a different marker portion. As noted in the rejections above, Pourahmadi teaches in paragraphs [0059]-[0064] that a sensor chip identifying portion is provided for providing information such as the type of chip, program information such as specific protocols for the processing of the chip, tolerances for accept and reject, serial numbers and lot codes for quality tracking, and provision for storing the results of the processing. This information is read by the inspection means when the sensor chip is positioned within the holding portion.

With respect to claims 8 and 9, Pourahmadi discloses a biological information inspection system comprising a plurality of light emitting diodes and photodetectors capable of monitoring a chemical reaction. This is disclosed in paragraphs [0117] and [0118]. Each light source and photodetector pair represents an inspection means capable of detecting biological information. Furthermore, a plurality of sensor chips

(Figure 3:101) are provided to fit into respective holding portions of a carrier (Figure 3:211) so that each sensor chip corresponds to an optical inspection means. This is disclosed in paragraph [0057]. Pourahmadi teaches in paragraphs [0059]-[0064] that a sensor chip identifying portion is provided for providing information such as the type of chip, program information such as specific protocols for the processing of the chip, tolerances for accept and reject, serial numbers and lot codes for quality tracking, and provision for storing the results of the processing. Additionally, Pourahmadi states that control, memory and analysis means are provided in the form of processing electronics, microprocessors, multiplexers and sensor circuits for controlling the operation of the chip. Pourahmadi further teaches that each sensor chip (Figure 16:177) is housed within a cartridge (Figure 16:161) that corresponds to a sensor chip holding portion (see Figure 3). Paragraphs [0059]-[0064] additionally indicate that when a cartridge is positioned within a holding position, a data reading portion is used to acquire information regarding the detection portion and a marker portion.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4) Claims 6, 7 and 10-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pourahmadi (US 20020055167) as applied to claims 4, 5, 8 and 9, and further in view of Carr (US 5888825).

Pourahmadi discloses the apparatus set forth in the rejections above. Although Pourahmadi teaches that each sensor chip cartridge includes identifying information, Pourahmadi does not expressly indicate that each cartridge and/or chip includes a bar code to be read by a line sensor.

Carr discloses a monitoring apparatus comprising a line sensor (Figure 2:1024) capable of optically interrogating a plurality of containers arranged side by side. This is disclosed in column 3, lines 57-67. Each container comprises a barcode mounted on a side for container identification purposes.

Pourahmadi and Carr are analogous art because they are from the same field of endeavor regarding means for identifying biological test devices.

At the time of the invention, it would have been obvious to provide the Pourahmadi system with a line sensor capable of reading barcodes positioned on the side portions of a plurality of sensor chips arranged in a row. Carr teaches that this configuration is desirable because it allows for the efficient identification of a plurality of different test devices using an automated mechanism. One of ordinary skill would have understood that it would have been possible to implement a well known detection means – such as a line sensor – in the apparatus of Pourahmadi in a predictable manner so as to obtain predictable results.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NATHAN A. BOWERS whose telephone number is (571)272-8613. The examiner can normally be reached on Monday-Friday 7 AM to 4 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on (571) 272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/William H. Beisner/
Primary Examiner, Art Unit 1797

/Nathan A Bowers/
Examiner, Art Unit 1797